City of San Ramon
Building and Safety Services
2401 Crow Canyon Road, San Ramon, CA 94583
Office: (925) 973-2580 Fax (925) 838-2821
E-mail: Building@sanramon.ca.gov
Website: www.sanramon.ca.gov
Updated: December 2019

Patio Covers, Arbors, Gazebos, etc.

DOCUMENT SUBMITTAL REQUIREMENTS

(Please provide three (3) complete sets of plans)

- ☐ **Cover Sheet Information**: Job site address; name; address and phone number of owner; name; address, phone number and stamp/signature of project designer/architect and or engineer; basic description of project.

- ☐ **Plot Plan:** Lot dimensions; total lot square footage; total square footage of existing accessory structures; dimensions which indicate the distances from all existing and proposed buildings to adjacent property lines and existing buildings; north arrow; identification of all streets and rights-of-way adjacent to the site; location of easements and visible utilities on site. (Min. Scale 1/8" = 1'-0")

- ☐ **Architectural Plans:** Exterior building elevations; floorplan identifying use and square footage of structure; building sections to include a section at the maximum building height and natural and finish grades; stairway, handrail and guardrail details; flashing details; roof covering specifications; exterior wall covering specifications, color, etc. (Min. Scale 1/4" = 1'-0")

- ☐ **Structural Plans:** Footing/foundation plan; size of materials to be utilized; floor framing plans; roof framing plan; structural frame details; structural material specifications, etc. (Min. Scale 1/4" = 1'-0")

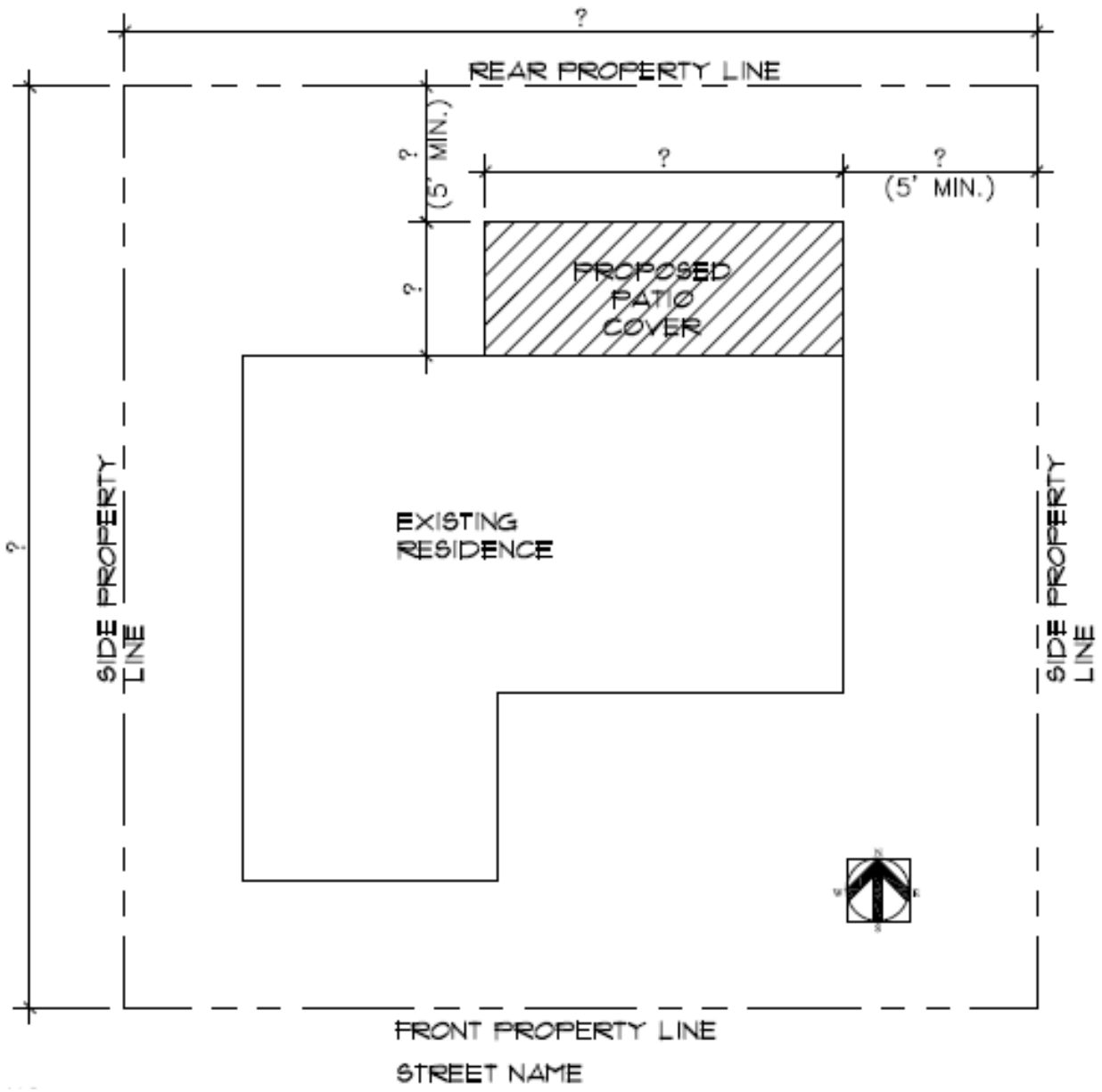
- ☐ **Check with San Ramon Planning Division** (925-973-2560) for building setback requirements.

- ☐ **Check with the San Ramon Engineering Department** (925-973-2670) for location of any easements.

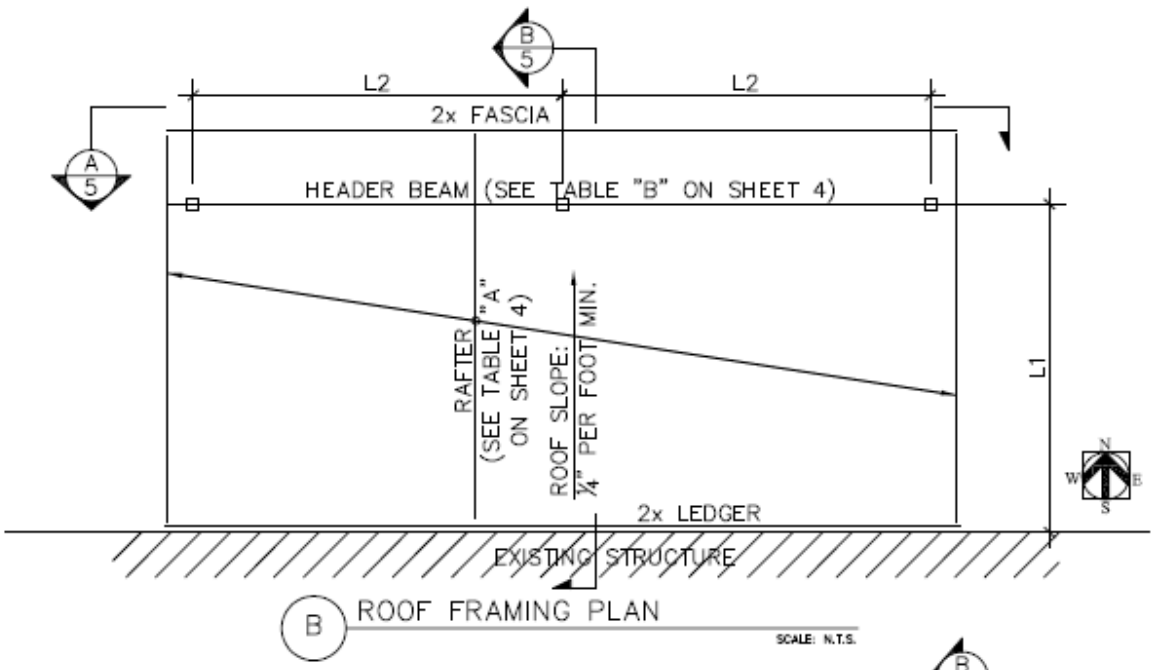
- ☐ **Electrical Plans:** If proposed, provide electrical plans which identify the size of the main service panel; show the location of all receptacles, switches, lighting fixtures and circuits assigned.

- ☐ **Calculations:** (2 sets) Structural calculations *may* be required. Note on plan the required design information per 2019 California Building Code, Section 1603.

SAMPLE PLOT PLAN:



SAMPLE FOUNDATION AND FRAMING PLANS:

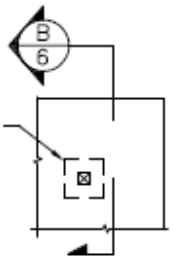


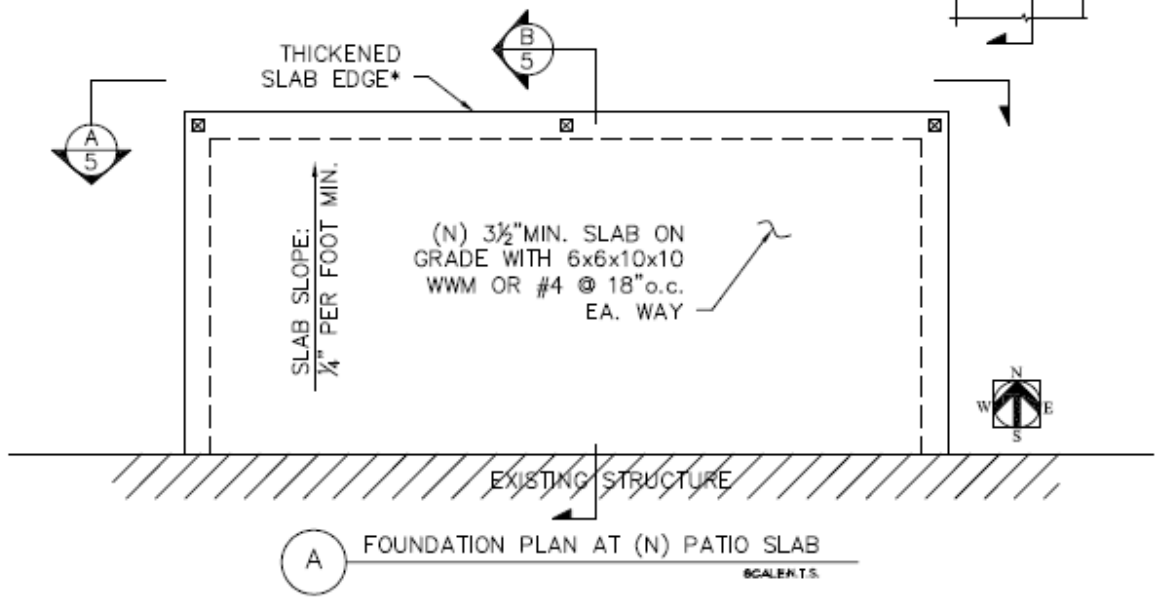
B ROOF FRAMING PLAN

SCALE: N.T.S.

*THICKENED SLAB EDGE OR ISOLATED FOOTING IS NOT REQUIRED WHEN THE COLUMN LOAD DOES NOT EXCEED 750 LB (i.e. ~38 SQ FT TRIB. AREA)

ISOLATED FOOTING* IS REQUIRED WHEN POST IS NOT LOCATED AT THE THICKENED SLAB EDGE

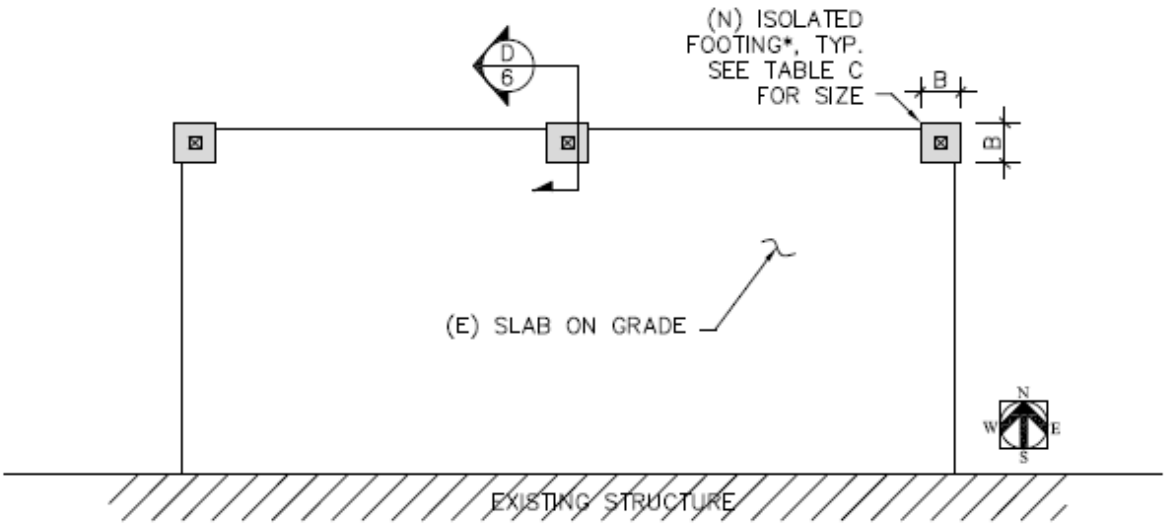




A FOUNDATION PLAN AT (N) PATIO SLAB

SCALE:N.T.S.

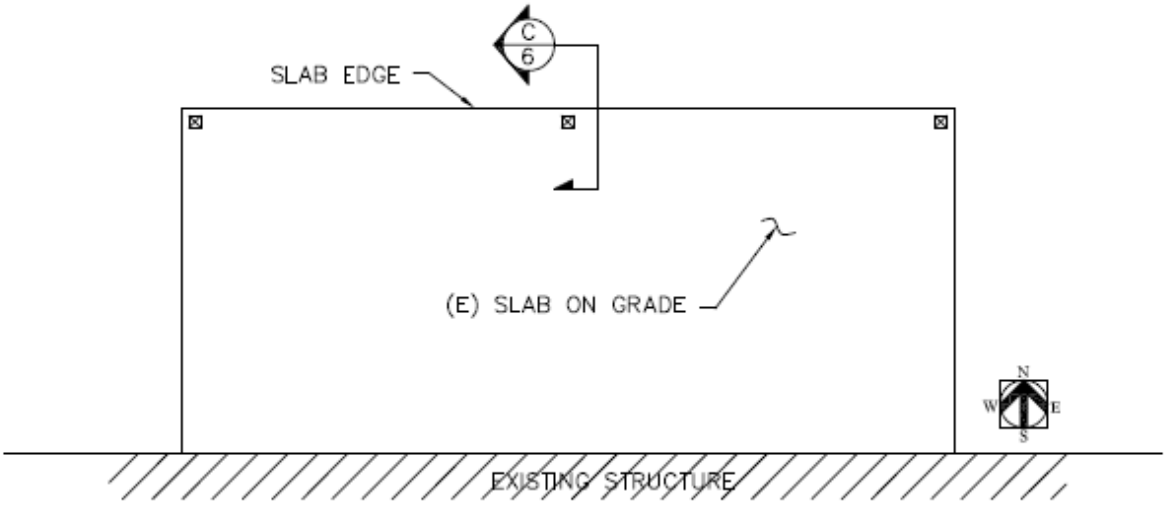
SAMPLE FOUNDATION PLAN AT (E) SLAB:



* (N) FOOTING REQUIRED WHEN ANY ONE OF THE CONDITIONS IN DET. A OCCUR

B FOUNDATION PLAN AT (E) PATIO SLAB
CASE 2: (N) FOOTING REQUIRED SCALE: N.T.S.

CONDITIONS FOR USING (E) SLAB FOR COLUMN SUPPORT:
1. MIN. 3½" SLAB THK.
2. SLAB IN GOOD CONDITIONS
3. COLUMN LOAD DOES NOT EXCEED 750 LB (~38 SQ FT TRIB. AREA)



A FOUNDATION PLAN AT (E) PATIO SLAB
CASE 1: NO FOOTING REQUIRED SCALE: N.T.S.

SAMPLE SPAN TABLE:

TABLE "A"		
RAFTER SPANS "L1" (DOUGLAS FIR LARCH #2 OR BETTER)		
SIZE	SPACING	SPAN
2x4	12"o.c.	10'–0"
	16"o.c.	8'–9"
	24"o.c.	7'–0"
	32"o.c.*	6'–3"*
2x6	12"o.c.	15'–9"
	16"o.c.	13'–9"
	24"o.c.	11'–3"
	32"o.c.*	9'–6"*
2x8	12"o.c.	20'–0"
	16"o.c.	18'–3"
	24"o.c.	14'–9"
	32"o.c.*	12'–9"*
2x10	12"o.c.	20'–0"
	16"o.c.	20'–0"
	24"o.c.	19'–0"
	32"o.c.*	16'–3"*
2–2x4 OR 4x4	24"o.c.	10'–0"
	32"o.c.*	8'–9"*
	48"o.c.*	7'–0"*
2–2x6 OR 4x6	24"o.c.	15'–9"
	32"o.c.*	13'–9"*
	48"o.c.*	11'–3"*
2–2x8 OR 4x8	24"o.c.	20'–0"
	32"o.c.*	18'–3"*
	48"o.c.*	14'–9"*

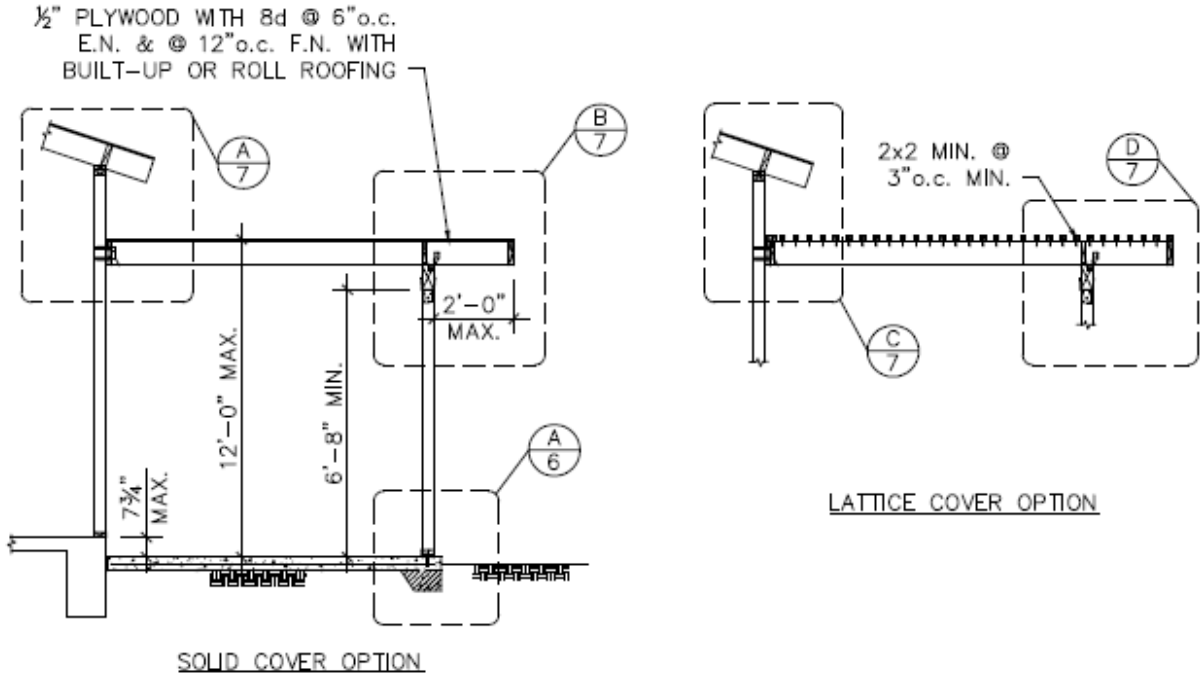
* SPACING AND SPAN DENOTED BY ASTERISKS ARE FOR LATTICE TYPE PATIO COVER ONLY.

NOTES:

1. LAG SCREWS MUST FULLY ENGAGE A WOOD STUD OR RIM JOIST AND BE PROVIDED WITH APPROPRIATE WASHERS.
2. THESE TABLES ARE APPLICABLE TO OPEN PATIO COVER ONLY, NOT FOR ENCLOSED PATIO ENCLOSURE.
3. PATIO COVER IN HILLSIDE AREAS SHALL BE DESIGNED BY CALIFORNIA LICENSED ARCHITECT OR ENGINEER FOR A 3–SECOND GUST MINIMUM NOMINAL DESIGN WIND SPEED (Vasd) OF 95 MPH AND EXPOSURE C
4. ALL WEATHER EXPOSED WOOD MEMBERS SHALL BE NATURALLY DURABLE OR PRESSURE TREATED.
5. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIP GALVANIZED OR STAINLESS STEEL.
6. WOOD POSTS, RAFTERS AND BEAMS SHALL BE DOUGLAS FIR LARCH NO. 2 OR BETTER.
7. CONCRETE COMPRESSIVE STRENGTH SHALL BE 2500psi MIN. AND REINFORCEMENT YIELD STRENGTH SHALL BE 40ksi MIN.
8. ALL METAL CONNECTORS AND HARDWARE SHALL MEET AN APPROVED STANDARD FOR ITS INTENDED USE AND BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
9. THIS GUIDELINE IS FOR MAX. COLUMN LOAD NOT TO EXCEED 750 POUNDS.
10. THE INFORMATION PROVIDED IN THIS DESIGN GUIDE CARRIES NO IMPLIED OR INFERRED GUARANTEE AGAINST FAILURE OR DEFECTS. BY USING THIS DESIGN GUIDE, THE CONTRACTOR/OWNER ACCEPTS THE FULL RESPONSIBILITY OF RISK. ALTERNATE DESIGN MAY BE USED WHEN PROVIDED WITH WET STAMPED AND SIGNED STRUCTURAL CALCULATIONS & DETAILS BY A CALIFORNIA LICENSED ENGINEER OR ARCHITECT.

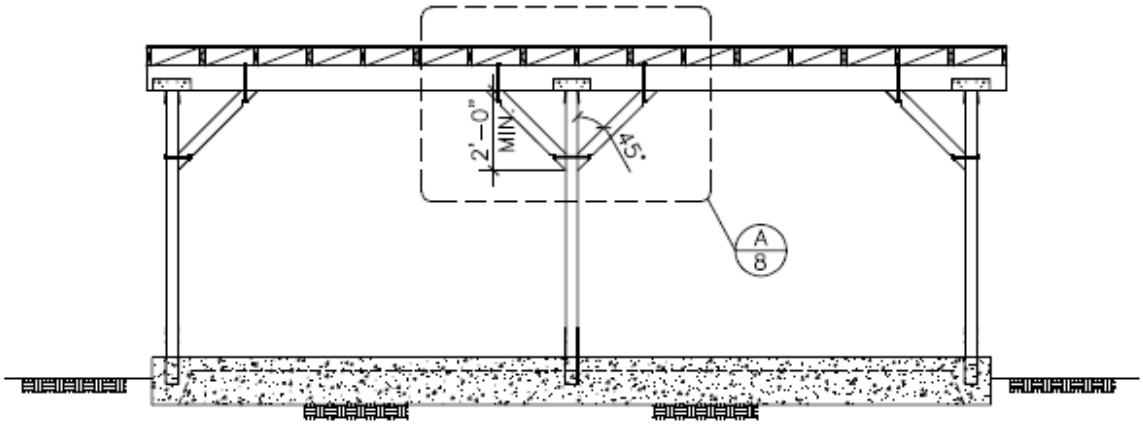
RAFTER SPAN	TABLE "B" HEADER SIZE & SPANS "L2" (DOUGLAS FIR LARCH #2 OR BETTER)		TABLE "C"	TABLE "D"	TABLE "E"
	HEADER		FOOTING SIZE	THRU' BOLTS	LEDGER LAG SCREW
	SPAN	SIZE			
UP TO 12'–0"	9'–3"	2–2x6 OR 4X6	12"SQ. x 12"DP.	(2)–½"ø @ 1½"o.c.	(1)–½"ø x 6½" LONG @ 16"o.c. STAGG.
	12'–0"	2–2x8 OR 4X8	13"SQ. x 12"DP.	(2)–⅝"ø @ 2½"o.c.	
	15'–6"	2–2x10 OR 4X10	14"SQ. x 12"DP.	(2)–⅝"ø @ 3½"o.c.	
	18'–0"	2–2x12 OR 4X12	15"SQ. x 12"DP.	(2)–¾"ø @ 4½"o.c.	
12'–1" TO 20–0"	7'–0"	2–2x6 OR 4X6	14"SQ. x 12"DP.	(2)–½"ø @ 1½"o.c.	(2)–⅜"ø x 4½" LONG @ 16"o.c.
	9'–3"	2–2x8 OR 4X8	15"SQ. x 12"DP.	(2)–⅝"ø @ 2½"o.c.	
	12'–0"	2–2x10 OR 4X10	16"SQ. x 12"DP.	(3)–½"ø @ 2½"o.c.	
	14'–6"	2–2x12 OR 4X12	18"SQ. x 12"DP.	(3)–⅝"ø @ 3"o.c.	

SAMPLE SECTIONS AND ELEVATION:



B PATIO COVER SECTION

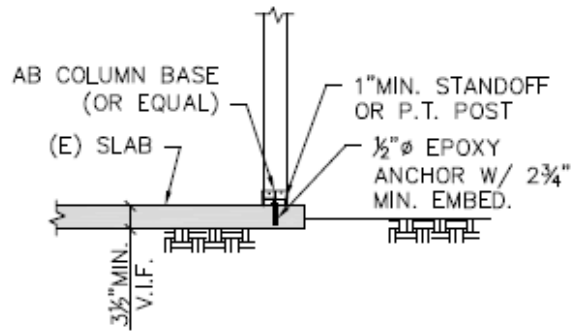
SCALE: 1/4"=1'-0"



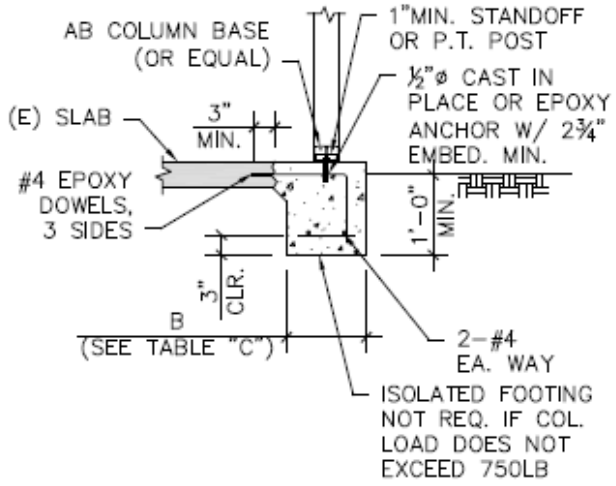
A PATIO COVER ELEVATION

SCALE: 1/4"=1'-0"

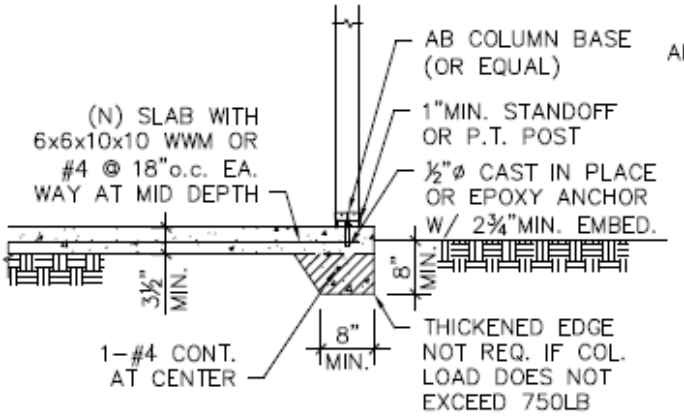
SAMPLE DETAILS:



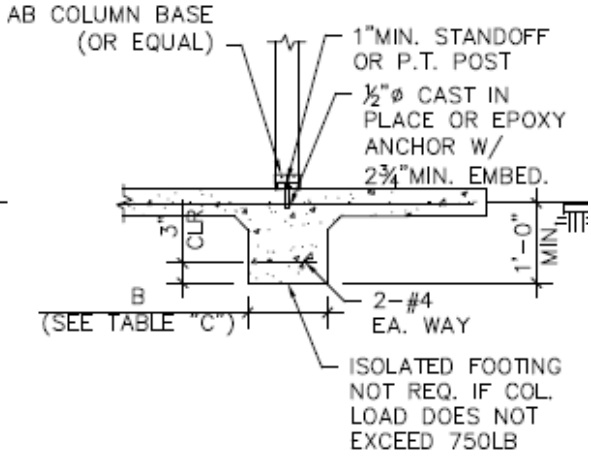
C (N) POST TO (E) SLAB DETAIL



D (N) ISOLATED FOOTING AT (E) SLAB DETAIL

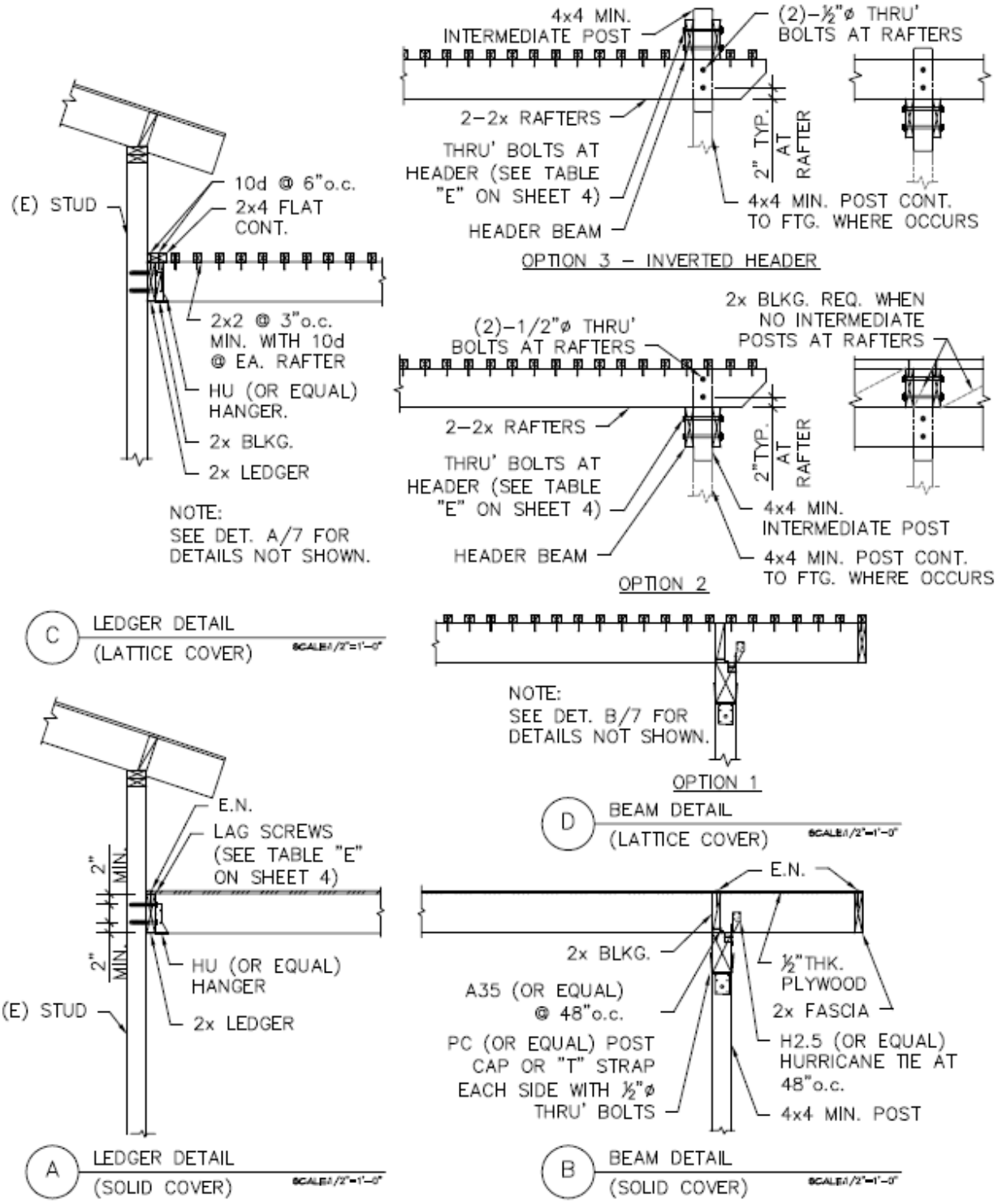


A (N) PATIO SLAB THICKENED EDGE DETAIL

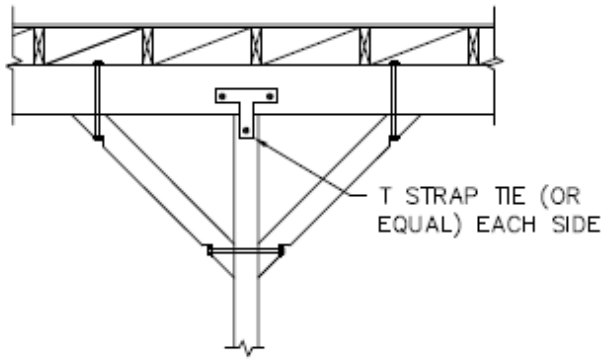


B (N) ISOLATED FOOTING IN (N) PATIO SLAB

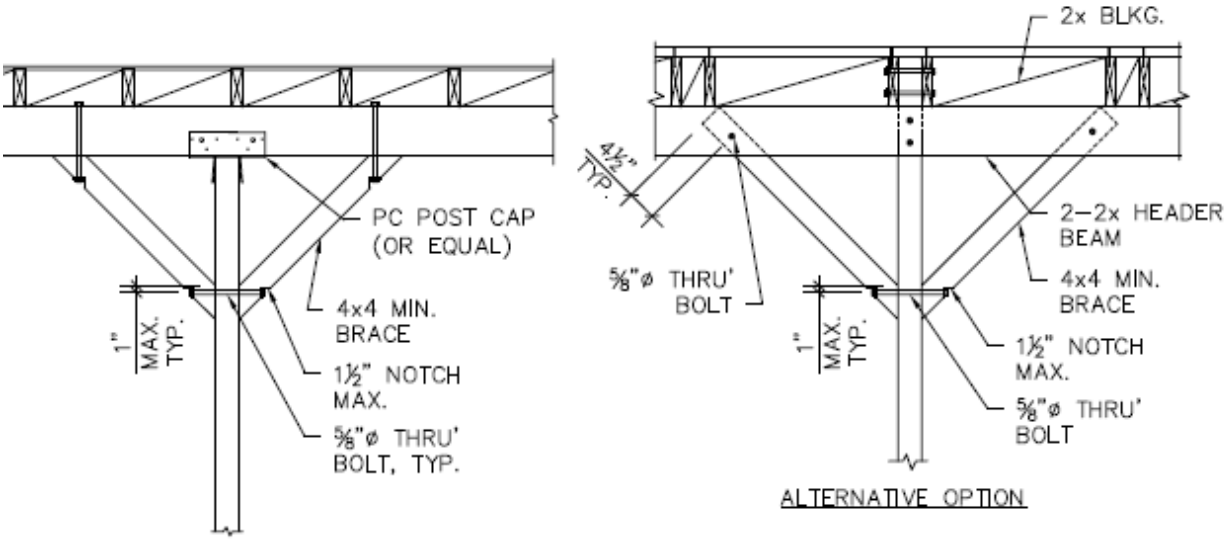
SAMPLE DETAILS CONTINUED:



SAMPLE DETAILS CONTINUED:



T STRAP TIE OPTION



ALTERNATIVE OPTION

A BRACE DETAIL

SCALE: 1/2"=1'-0"